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THE
PSYCHOLOGICAL INFLUENCE
OF
ERRORS OF REFRACTION
AND OF
THEIR CORRECTION.

BY

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PHILADELPHIA.

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The fact indicated by the title above is one that I have repeatedly observed, and yet I have never so much as seen it alluded to in the most distant way by ophthalmic surgeons. It is now a matter of common knowledge that the pathological relations of the eye and the rest of the system are of the most intimate nature ; that refractive errors or muscular insufficiencies are the great prolific sources of headache, and that gastric troubles, and numerous forms of reflex neuroses, even chorea and more profound derangements of the nervous system, may ultimately be due to eye-strain. But no one seems to have thought what a tremendous influence upon character and life may be exerted by an uncorrected eye-strain. The microscopic size of the defect has served to keep it ignored, and its influence also minimized by the general ignorance of the

extent and exceeding intimacy of relation of the organ of sight and the organ of mind. Indeed, so thorough-going and wide-spread and causal are these relations that the reach of all the other senses combined is but a fraction of that of vision in the creation of intellect. In the light of evolution and psychology, reason and mind may almost be said to be products of the visual mechanism. Language itself, the *sine qua non* of intellect and civilization, is but the record of things seen; the letters of the alphabet are each and all but conventionalized pictographs, and mental pictures, or signs of pictures, are the counters used by the mind in all the processes of logic or thought. The ocular mechanism is like a bank at which mental counters and notes are tested and cashed with the coin of reality and truth. What more natural, therefore, than that a disorganized and faulty bank should disarrange the processes dependent upon it. If a false image, or one that is distorted, or one that is only reached by an exhausting expenditure of energy is the model of comparison, the action of the mind is disturbed, heredity is at war with reality, and the mental mechanism undergoes a subtile but profound change. It is, of course, in the young that this unfortunate process goes on at the most rapid rate, but is all the less noticed by parent or teacher. The most frequent method in which an uncorrected eye-strain acts disastrously upon the developing mind is in making study and

literary labor so irksome that the mind is slowly but irrevocably turned from intellectual pursuits and directed to physical activities for an outlet of its energy. This, in the formative period of the child and youth, is of the most absolute and tragical importance.

A year ago a boy of nine years was brought to me for examination of the eyes. He was a child of large brain, active mind, and fine character, whose parents were educated, intellectual people. But *this boy had never learned his letters*. It had been utterly impossible for him to exercise his accommodation long enough upon a printed page to learn the alphabet. I corrected his hyperopic astigmatism, and within the past year he has more than made up for lost time; in reading, arithmetic, writing, and such studies being well ahead of children of his age. The gist of the matter consists in the question, What would have been the result if this boy's parents had not been keen-witted enough to suspect ocular trouble? Plainly, the boy would have grown up with the poorest interest in intellectual pursuits, and more and more unconsciously driven to physical ones; a professional life would not have been chosen, and the position for which, by all the laws of heredity and endowment, he was fitted to take in life would, if thought of at all, have been only as a matter of regretful wonder on the part of parent or friend that it had not been adopted. I have

had many similar examples in my practice. For instance, a woman, 22 years old, came to me suspecting that her daily headaches, persisting for many years, might be connected with eye troubles. It was, indeed, so. Her headaches disappeared, and other nervous derangements and choreic affections, and her general deterioration of health was changed as if by magic from the day her hyperopic astigmatism and insufficiency were relieved. But I also was interested to learn that in the past ten years one by one the intellectual and æsthetic occupations she had heroically undertaken had been laid aside, and everything dependent upon near vision, such as study, languages, painting, needlework, music, etc., etc., had been found so tiresome that her life had been wrenched from its natural order, and her whole mind had been regretfully turned to other exercises and uses.

Still another somewhat pathetic case came to me last week. Parents and teachers had for years stupidly scolded and punished a bright little girl ten years old, because of her inattention to studies and because of her petulance, nervousness, and insubordination. In fact, the child was quite choreic, and the pinched eyes and bent head told of eye-strain at once. Both eyes were astigmatic to the fearful degree of 5.50 D.—the highest astigmatic error I ever have met with. Who can doubt that her spectacles will have the most happy effect in changing the child's

disposition, character, and the trend of her whole life, not only physically but in a psychological sense? There can be no doubt that this subtle and far-reaching cause—eye-strain—is at work everywhere to balk and blight. How many vocations and careers—intellectual, professional, or æsthetic—have been left unfilled, the natural aptitudes of character and endowment failing to reach their predestined fruition, because this subtle but effective enemy rendered it impossible? It is easy to pool-poo, and to talk glibly about the ridiculous conceits and exaggerations of the medical specialist. The pique of a dogmatist or hobby of a narrow-minded specialist is as nothing to the duty to truth and to humanity. The question remains, Is it so or not so? If my contention is true to the extent of the one-hundredth part of what I believe, it is a matter of the most profound significance for every parent, guardian, or general physician. Exactly their particular child or patient or friend may be undergoing an experience that is moulding the whole course of its future life, character, and influence upon the world. Liebreich contends that Turner's vision of the world and his pictures, and hence his æsthetic influence, was distorted by his astigmatism, and that if you wish to see a picture of his as it should have been painted, you must look at it through the cylindrical lens Turner should have worn to correct his astigmatism. If this be so,

how sad it is to think Turner had not had such a lens! But however this may be, we cannot doubt that many a promising life has been switched, permanently crippled, into the side-tracks or lumber-yards of mercantile or humdrum life, that might have swept across continents, bearing its messages of intellectual honor and humanitarian service to all.

I cannot avoid the conclusion, let who will indulge his sneer and slur at "the weak vagaries of the specialist," that all young people who show any disinclination to literary work, or in whom such work produces any headache, ocular pains, or weariness and dimness—all such should at once be sent to a competent oculist for examination as to the existence of refraction-errors or muscular insufficiencies.

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